

REMARKS

Claims 1-20 were pending in this application.

Claims 1-20 have been rejected.

Claims 5 and 7 have been amended as shown above.

Claims 1-20 remain pending in this application.

Reconsideration and full allowance of Claims 1-20 are respectfully requested.

I. REJECTION UNDER 35 U.S.C. § 103

The Office Action rejects Claims 1-20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,026,288 to Bronner (“*Bronner*”) in view of U.S. Patent No. 5,734,974 to Callaway, Jr. et al. (“*Callaway*”). This rejection is respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. (*MPEP* § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992)). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. (*MPEP* § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984)). Only when a *prima facie* case of obviousness is established does the burden shift to the Applicant to produce evidence of nonobviousness. (*MPEP* § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993)). If the Patent Office does not produce a *prima facie* case of unpatentability,

then without more the Applicant is entitled to grant of a patent. (*In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985)).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. (*In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993)). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on the Applicant's disclosure. (MPEP § 2142).

Bronner recites an apparatus for reducing power consumption in a communication system using a received signal strength indicator ("RSSI") for a received signal. (*Abstract*). As shown in Figure 2, the apparatus of *Bronner* processes a received signal using various filters, amplifiers, and mixers. (*Col. 5, Lines 15-59*). The output of a final amplifier 260 (which represents the signal to be processed) is converted to a DC level to produce an RSSI signal. (*Col. 5, Lines 9-12 and 59-61*). The RSSI signal is provided to two comparators 275 and 280 coupled to different reference voltages REF1 and REF2. (*Figure 2*). The comparator 280 controls a current source 211, which provides bias current to an amplifier 210 in the apparatus. (*Col. 5,*

Lines 23-28). The comparator 275 controls a current source 221 in a mixer 220. (*Col. 5, Lines 38-42*).

First, the apparatus of *Bronner* only compares a single signal (the RSSI signal) to different thresholds. The apparatus of *Bronner* does not compare multiple signals to multiple thresholds. In contrast, Claims 1, 7, and 15 recite that one or more actions occur in response to one signal (an “amplified incoming signal”) exceeding a first threshold and another signal (a “desired signal”) not exceeding a second threshold.

Second, Claims 1, 7, and 15 recite that one or more actions occur “in response to [an] amplified incoming signal exceeding a first threshold and [a] desired signal not exceeding a second threshold.” *Bronner* fails to disclose, teach, or suggest performing any actions in response to an “amplified incoming signal exceeding a first threshold” and a “desired signal not exceeding a second threshold.” In particular, *Bronner* fails to disclose, teach, or suggest performing any actions when both of these conditions are met.

The apparatus of *Bronner* compares the RSSI signal to a first threshold and adjusts the current used by a mixer 220. Separately, the apparatus of *Bronner* compares the RSSI signal to a second threshold and adjusts the current used by an amplifier 205. Each of these actions is independent of the other. In other words, the comparator 275 in *Bronner* adjusts the current used by the mixer 220 without reference to the output of the comparator 280, and the comparator 280 in *Bronner* adjusts the current used by the amplifier 205 without reference to the output of the comparator 275. As a result, *Bronner* only discloses, teaches, or suggests that the current used by the amplifier 205 is adjusted depending on whether a single signal exceeds a single threshold.

Bronner also discloses, teaches, or suggests that the current used by the mixer 220 is adjusted depending on whether a single signal exceeds a single threshold.

In contrast, Claims 1, 7, and 15 recite that one or more actions occur in response to one signal exceeding a first threshold “and” another signal not exceeding a second threshold. Both conditions must be met in order for the one or more actions to occur. *Bronner* never adjusts the current used by the amplifier 205 in response to one signal exceeding a first threshold “and” another signal not exceeding a second threshold.

For these reasons, *Bronner* fails to disclose, teach, or suggest allowing one or more second amplifiers to amplify an incoming signal and/or increasing a current supplied to one or more first amplifiers “in response to the amplified incoming signal exceeding a first threshold and the desired signal not exceeding a second threshold” as recited in Claims 1, 7, and 15.

Callaway recites a receiver where an output signal (representing the signal to be processed) is provided to an automatic gain control (“AGC”) detector 114, which detects an average level of the output signal. (*Abstract; Col. 2, Lines 15-17*). A state machine 116 uses the detected average level of the output signal to generate control signals. (*Abstract*). In particular, the state machine 116 may generate different control signals depending on whether the average level of the output signal is above a first threshold, below a second threshold, or between the thresholds. (*Col. 2, Lines 22-32*). The control signals are used by a stepwise variable gain controller 118, which controls the gain provided by an amplifier 104. (*Abstract; Col. 2, Lines 2-5 and 34-41*).

Callaway simply recites a receiver where the gain provided by an amplifier is adjusted

based on a single signal. While multiple thresholds are used in *Callaway*, the same value (the average level of a signal) is compared to both thresholds. *Callaway* never adjusts the gain of the amplifier 104 in response to one signal (an “amplified incoming signal”) exceeding a first threshold “and” another signal (a “desired signal”) not exceeding a second threshold.

For these reasons, *Callaway* fails to disclose, teach, or suggest allowing one or more second amplifiers to amplify an incoming signal and/or increasing a current supplied to one or more first amplifiers “in response to the amplified incoming signal exceeding a first threshold and the desired signal not exceeding a second threshold” as recited in Claims 1, 7, and 15.

Because *Bronner* and *Callaway* both fail to disclose, teach, or suggest these elements of Claims 1, 7, and 15, the proposed *Bronner-Callaway* combination also fails to disclose, teach, or suggest these elements of Claims 1, 7, and 15. The Office Action therefore has not established a *prima facie* case of obviousness against Claims 1, 7, and 15 (and their dependent claims).

Accordingly, the Applicant respectfully requests withdrawal of the § 103 rejection and full allowance of Claims 1-20.

II. CONCLUSION

The Applicant respectfully asserts that all pending claims in this application are in condition for allowance and respectfully requests full allowance of the claims.

SUMMARY


If any issues arise, or if the Examiner has any suggestions for expediting allowance of this application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *wmunck@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

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